



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,122	09/15/2003	Bruno Greppi	60681.300101	7151

7590 12/15/2004

MICHAEL J. HUGHES, Esq.  
IPLO  
Intellectual Property Law Offices  
1901 S. Bascom Avenue, Suite 660  
Campbell, CA 95008

EXAMINER

WILLIAMS, THOMAS J

ART UNIT	PAPER NUMBER
	3683

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/667,122	GREPPI, BRUNO
Examiner	Art Unit	
Thomas J. Williams	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 15 October 2004.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-15 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
    Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
    Paper No(s)/Mail Date. \_\_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.

## DETAILED ACTION

1. Acknowledgment is made in the receipt of the amendment filed October 15, 2004.
2. The drawings were received on October 15, 2004. These drawings are approved.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 8, 9, and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3,295,640 to Beuchle.

Re-claims 1 and 8, Beuchle discloses a brake disk, comprising : a disk member having an inner rim, an outer rim, an obverse face, and a reverse face, the faces are provided with circumferentially alternating protruding segments (4, 4', 4", 5, 5', and 5") and indented segments 2 and 3, the protruding segments will engage brake pads (column 1 lines 50-54), the indented segments will facilitate cooling. The disk plane is entirely contained in the material of the disk throughout the intersection therewith, see figure 2. A disk plane can be drawn such that it will not intersect any indented segments.

Re-claims 2, 6, 9 and 12-14, see figures.

Re-claims 3 and 15, the angle of incidence of the leading edge with the brake pad is 0 degrees (or perpendicular), 0 degrees is less than 45 degrees.

Re-claim 4, the indented segments are open to the outer rim and the inner rim, see figure 5.

Re-claims 5 and 11, the inner and outer rim portions have cooling channels inlets and outlets as scalloped formations for increasing surface area, as such the inner and outer rims have an irregular shape (i.e. not smooth and without recesses). When viewing figure 2 the outlets have a curved formation, the inlets are best shown in figures 3-5.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beuchle. Beuchle teaches that the indented segments are smaller in circumferential width than that of the protruding segments. However, Beuchle fails to teach what the circumferential width ratio of the indented segments to the protruding segments is, specifically if the ratio is in the range of 10%-40%, or if the indented segment has a circumferential width of less than 40% of the protruding segment. It would have been obvious to one of ordinary skill in the art as a matter of design choice to have provided the disc of Beuchle with indented segments having a circumferential width less than 40% of the protruding segments or with a width ratio of between 10%-40%, since the applicant fails to disclose that having the width of the indented segments less than 40% of the protruding segment solves any stated problem or is for any particular purpose and it appears that having the circumferential width of the indented segment less than 40% of the protruding segment in Beuchle would have allowed sufficient cooling for the disc.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is (703) 305-1346. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bucci, can be reached at (703) 308-3668. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

TJW

December 9, 2004

THOMAS WILLIAMS  
PATENT EXAMINER

Thom Williams

AV 3683  
12/9/04